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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SHO-0036

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EXAMINER

KIM, ANDREW

ART UNIT

PAPER NUMBER

3716

MAIL DATE

DELIVERY MODE

10/05/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,041	IMURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ANDREW KIM	3716	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7,9,10 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7, 9, 10, 12, 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/2/11</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

In response to the amendment filed 5/19/11 in which claims 1, 2, 4, 5, 7, and 9-25 are pending.

#### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Gaming Machine With Image Display Assistance Device.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**5. Claims 1, 2, 4, 5, 7, and 9-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2001/0031658 A1 to Ozaki in view of Fujii (JP Pub. No. 11-155998 A) and further of Hagiwara (US 5,580,055 A).**

Regarding claim 1, Ozaki discloses a gaming machine comprising:

a variable display device configured to variably display a plurality of symbol rows each having a symbol placement face formed in a curved surface on which a plurality of symbols are placed (paragraphs [0046, 0048]);

an image display device being provided in front of and opposed to the variable display device and configured to display the symbols through a flat symbol transmission face and to display video images concerning a game (paragraphs [0042-0045]), the image display device including a liquid crystal display for displaying the video images (paragraph [0138]) and a light guide plate located behind the liquid crystal display and in front of the variable display device (paragraphs [0137, 0139]), the light guide plate having at least one opening through which the

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symbols on the variable display device are displayed, the light guide plate providing backlighting to the liquid crystal display in regions outside of the opening (paragraphs [0045, 0137, 0139])

a symbol illumination device configured to illuminate the symbols (paragraph [0138]).

Ozaki substantially discloses the invention as claimed but fails to explicitly teach illumination behind the symbols. Instead, Ozaki discloses image display assistance devices and illumination in front of the symbols. In an analogous reference, Hagiwara discloses an amusement device with an illumination device inside of the reel (Hagiwara, fig. 5, 6, 13 and 14, col. 8, lines 27-62 and col. 6, lines 1-41). One of ordinary skill in the art at the time of the invention would have found it obvious to modify Ozaki to intensify or excite the player's expectations for specific symbols for which high winning is made (Hagirawa, col. 1, lines 50-55). Therefore, it would have been obvious to one of ordinary skill one of ordinary skill in the art at the time of the invention to modify Ozaki to illuminate certain symbols to intensify the player's expectations as desirably taught by Hagirawa. Furthermore, all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention and when combined as discussed, the combination of the prior art would naturally produce and assist in sufficient backlighting for the LCD.

Ozaki substantially discloses the invention as claimed but fails to explicitly teach an image display assistance device being provided lateral to an area between the variable display device and the image display device to cover an area sandwiched between the symbol placement face and the symbol transmission face, and configured to assist image display of the image

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display device and reflects light emitted from the rear illumination lamp. Instead, Ozaki seems to remain silent regarding the lateral area between the variable display and the image display device. However, in an analogous reference, Fujii discloses many reflectors including the lateral area between the symbol placement face and the symbol transmission face to provide the symbol variable display better visibility of the symbols (fig. 4, items 25, 26 and 27, paragraph(s) [0009, 0024]-[0028]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ozaki with reflectors to provide better visibility of the symbols.

Regarding claim 2, discloses a gaming machine comprising:

- a variable display device configured to variably display a plurality of symbol rows on which a plurality of symbols are placed (paragraphs [0046, 0048]);

- an image display device being provided in front of the variable display device and configured to display video images concerning a game (paragraphs [0042-0045]), the image display device including a liquid crystal display for displaying the video images (paragraph [0138]) and a light guide plate located behind the liquid crystal display and in front of the variable display device (paragraphs [0137, 0139]), the light guide plate having at least one opening through which the symbols on the variable display device are displayed, the light guide plate providing backlighting to the liquid crystal display in regions outside of the opening (paragraphs [0045, 0137, 0139])

- a symbol illumination device configured to illuminate the symbols (paragraph [0138]).

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Ozaki substantially discloses the invention as claimed but fails to explicitly teach illumination behind the symbols. Instead, Ozaki discloses image display assistance devices and illumination in front of the symbols. In an analogous reference, Hagiwara discloses an amusement device with an illumination device inside of the reel (Hagiwara, fig. 5, 6, 13 and 14, col. 8, lines 27-62 and col. 6, lines 1-41). One of ordinary skill in the art at the time of the invention would have found it obvious to modify Ozaki to intensify or excite the player's expectations for specific symbols for which high winning is made (Hagirawa, col. 1, lines 50-55). Therefore, it would have been obvious to one of ordinary skill one of ordinary skill in the art at the time of the invention to modify Ozaki to illuminate certain symbols to intensify the player's expectations as desirably taught by Hagirawa. Furthermore, all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention and when combined as discussed, the combination of the prior art would naturally produce and assist in sufficient backlighting for the LCD.

Ozaki substantially discloses the invention as claimed but fails to explicitly teach an image display assistance device being provided lateral to an area between the variable display device and the image display device to cover an area sandwiched between the symbol placement face and the symbol transmission face, and configured to assist image display of the image display device and reflects light emitted from the rear illumination lamp. Instead, Ozaki seems to remain silent regarding the lateral area between the variable display and the image display device. However, in an analogous reference, Fujii discloses many reflectors including the lateral

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area between the symbol placement face and the symbol transmission face to provide the symbol variable display better visibility of the symbols (fig. 4, items 25, 26 and 27, paragraph(s) [0009, 0024]-[0028]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ozaki with reflectors to provide better visibility of the symbols.

Regarding claim 4, Ozaki in view of Fujii and Hagiwara discloses wherein the symbol illumination device comprises a front illumination lamp configured to illuminate the symbols from an angled direction of the front of the symbols, and wherein the image display assistance device reflects light emitted from the front illumination lamp (paragraphs [0137-0139]).

Regarding claim 5, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device is attached to a housing that houses the variable display device (Fujii, fig. 4, item 27).

Regarding claims 6, 16, 19, and 25 Ozaki in view of Fujii and Hagiwara substantially discloses the invention as claimed but fails to explicitly teach that the image display assistance device comprises a white plate. Instead, Fujii discloses that the image display assistance device are reflector plates (fig. 4, items 25, 26 and 27) instead of specific white plates. However, one of ordinary skill in the art at the time of the invention would have known that surfaces lighter in color reflect light better than surfaces darker in color (Official Notice). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to use white plates because white reflects light better than most other colors.

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Regarding claim 7, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device comprises a mirror plate (paragraph [0138]).

Regarding claim 9, Ozaki in view of Fujii and Hagiwara discloses a gaming machine comprising:

- a variable display device configured to variably display a plurality of symbol rows on which a plurality of symbols are placed (paragraphs [0046, 0048]);

- an image display device being provided in front of the variable display device and configured to display video images concerning a game (paragraphs [0042-0045]), the image display device including a liquid crystal display for displaying the video images (paragraph [0138]) and a light guide plate located behind the liquid crystal display and in front of the variable display device (paragraphs [0137, 0139]), the light guide plate having at least one opening through which the symbols on the variable display device are displayed, the light guide plate providing backlighting to the liquid crystal display in regions outside of the opening (paragraphs [0045, 0137, 0139]);

- a side illumination device being provided lateral to an area between the variable display device and the image display device and configured to illuminate the symbols from a side of the symbols (paragraph [0138]); and

- a case that houses at least a part of the variable display device (fig. 1 and 2, paragraphs [0040-0046]).

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Ozaki substantially discloses the invention as claimed but fails to explicitly teach illumination behind the symbols. Instead, Ozaki discloses image display assistance devices and illumination in front of the symbols. In an analogous reference, Hagiwara discloses an amusement device with an illumination device inside of the reel (Hagiwara, fig. 5, 6, 13 and 14, col. 8, lines 27-62 and col. 6, lines 1-41). One of ordinary skill in the art at the time of the invention would have found it obvious to modify Ozaki to intensify or excite the player's expectations for specific symbols for which high winning is made (Hagirawa, col. 1, lines 50-55). Therefore, it would have been obvious to one of ordinary skill one of ordinary skill in the art at the time of the invention to modify Ozaki to illuminate certain symbols to intensify the player's expectations as desirably taught by Hagirawa. Furthermore, all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention and when combined as discussed, the combination of the prior art would naturally produce and assist in sufficient backlighting for the LCD.

Ozaki substantially discloses the invention as claimed but fails to explicitly teach an image display assistance device being provided lateral to an area between the variable display device and the image display device to cover an area sandwiched between the symbol placement face and the symbol transmission face, and configured to assist image display of the image display device and reflects light emitted from the rear illumination lamp. Instead, Ozaki seems to remain silent regarding the lateral area between the variable display and the image display device. However, in an analogous reference, Fujii discloses many reflectors including the lateral

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area between the symbol placement face and the symbol transmission face to provide the symbol variable display better visibility of the symbols (fig. 4, items 25, 26 and 27, paragraph(s) [0009, 0024]-[0028]). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ozaki with reflectors to provide better visibility of the symbols.

Regarding claim 10, Ozaki in view of Fujii and Hagiwara discloses a gaming machine comprising:

- a first display device configured to variably display a plurality of symbols (paragraphs [0046, 0048]);

- a second display device including a display panel that is provided opposed to and spaced from the first display device, and the second display device configured to display the symbols through the display panel and to display video images concerning a game on the display panel the display panel being a liquid crystal display for displaying the video images (paragraph [0138]) and the second display device including a light guide plate located behind the liquid crystal display and in front of the variable display device (paragraphs [0137, 0139]), the light guide plate having at least one opening through which the symbols on the variable display device are displayed, the light guide plate providing backlighting to the liquid crystal display in regions outside of the opening (paragraphs [0045, 0137, 0139]);

Ozaki substantially discloses the invention as claimed but fails to explicitly teach illumination behind the symbols. Instead, Ozaki discloses image display assistance devices and illumination in front of the symbols. In an analogous reference, Hagiwara discloses an

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amusement device with an illumination device inside of the reel (Hagiwara, fig. 5, 6, 13 and 14, col. 8, lines 27-62 and col. 6, lines 1-41). One of ordinary skill in the art at the time of the invention would have found it obvious to modify Ozaki to intensify or excite the player's expectations for specific symbols for which high winning is made (Hagirawa, col. 1, lines 50-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ozaki to illuminate certain symbols to intensify the player's expectations as desirably taught by Hagirawa. Furthermore, all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention and when combined as discussed, the combination of the prior art would naturally produce and assist in sufficient backlighting for the LCD.

Ozaki substantially discloses the invention as claimed but fails to explicitly teach an image display assistance device being provided lateral to an area between the variable display device and the image display device to cover an area sandwiched between the symbol placement face and the symbol transmission face, and configured to assist image display of the image display device and reflects light emitted from the rear illumination lamp. Instead, Ozaki seems to remain silent regarding the lateral area between the variable display and the image display device. However, in an analogous reference, Fujii discloses many reflectors including the lateral area between the symbol placement face and the symbol transmission face to provide the symbol variable display better visibility of the symbols (fig. 4, items 25, 26 and 27, paragraph(s) [0009,

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0024]-[0028])). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ozaki with reflectors to provide better visibility of the symbols.

Regarding claim 12, Ozaki in view of Fujii and Hagiwara discloses wherein the display assistance device includes an illumination device that illuminates the area between the first display device and the display panel of the second display device (paragraph [0138]).

Regarding claim 13, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device comprises a planar plate (Fujii: fig. 4, items 24, 25, 26 and 27, paragraph(s) [0024]-[0028])).

Regarding claim 14, Ozaki in view of Fujii and Hagiwara discloses wherein the symbol illumination device further comprises a front illumination lamp configured to illuminate the symbols from an angled direction of the front of the symbols, and wherein the image display assistance device further reflects light emitted from the front illumination lamp (paragraphs [0137-0139])).

Regarding claim 15, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device is attached to a housing that houses the variable display device (Fujii: fig 4, paragraphs [0024-0028])).

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Regarding claim 17, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device comprises a mirror plate (Fujii: fig. 4, item 27, paragraph [0028]).

Regarding claim 18, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device comprises a planar plate (Fujii: fig. 4, items 24, 25, 26 and 27, paragraph(s) [0024]-[0028]).

Regarding claim 20, Ozaki in view of Fujii and Hagiwara discloses wherein the planar plate comprises a mirror plate (Fujii: fig. 4, item 27, paragraph [0028]).

Regarding claim 21, Ozaki in view of Fujii and Hagiwara discloses wherein the light reflector comprises a planar plate (Fujii: fig. 4, items 24, 25, 26 and 27, paragraph(s) [0024]-[0028]).

Regarding claim 22, Ozaki in view of Fujii and Hagiwara discloses wherein the light reflector reflects light from the rear illumination lamp (Fujii: fig. 4, items 24, 25, 26 and 27, paragraph(s) [0024]-[0028]).

Regarding claim 23, Ozaki in view of Fujii and Hagiwara discloses wherein the image display assistance device is attached to a housing that houses the first display device (Fujii: fig 4, paragraphs [0024-0028]).

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Regarding claim 24, Ozaki in view of Fujii and Hagiwara discloses wherein the first display device includes a plurality of mechanical reels (paragraph [0046]).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 4, 5, 7, and 9-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW KIM whose telephone number is (571)272-1691. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on 571-272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dmitry Suhol/  
Supervisory Patent Examiner, Art Unit  
3716

10/3/2011 /A. K./  
Examiner, Art Unit 3714